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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,376	07/17/2003	Tomokazu Hayashi	10517/173	9710
23838	7590	08/16/2006	EXAMINER	
KENYON & KENYON LLP 1500 K STREET N.W. SUITE 700 WASHINGTON, DC 20005			YUAN, DAH WEI D	
			ART UNIT	PAPER NUMBER
			1745	

DATE MAILED: 08/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/620,376

Applicant(s)

HAYASHI ET AL.

Examiner

Dah-Wei D. Yuan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 15 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07172003,05042004, 07222004
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

**SEAL STRUCTURE OF FUEL CELL UNIT
AND MANUFACTURING METHOD OF THE SAME**

Examiner: Yuan

S.N. 10/620,376

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July 24, 2006

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-14, in Paper filed June 29, 2006 is acknowledged. Therefore, claims 15,16 are withdrawn from consideration.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-12,14 are rejected under 35 U.S.C. 102(e) as being anticipated by Inoue et al. (US 2001/0044042 A1).

With respect to claims 1-5,8-10,12,14, Inoue et al. teach a PEM fuel cell stack comprising a plurality of fuel cells, a gel sealant, and retaining portions (28,30) which are formed on the separators between which the sealant (S) is interposed. See Figures 2,6; Paragraph 18.

With respect to claims 6,7, Inoue et al. teach the spacing portion can be part of the separator (28) or be separate from the separators (30). See Figure 2.

With respect to claim 11, the retaining portion is formed concave toward the sealant. See Figure 2.

4. Claims 1-6,8-11,14 are rejected under 35 U.S.C. 102(e) as being anticipated by Suenaga et al. (US 2002/0051902 A1).

With respect to claims 1-5,8-10,14, Suenaga et al. teach a PEM fuel cell stack comprising a plurality of fuel cells, a sealant selected from an elastomer type or a thermoplastic elastomer type, and retaining portions (31,41) which are formed on the upper and lower dies (30,40) between which the sealant (10A) is interposed and adhered to the electrolyte membrane (23). See Figure 1E; Paragraphs 19,37.

With respect to claim 6, Suenaga et al. teach the spacing portion can be part of the upper and lower dies. See Figure 1E.

With respect to claim 11, the retaining portion is formed concave toward the sealant. See Figure 1E.

5. Claims 1-6,8-11,13,14 are rejected under 35 U.S.C. 102(e) as being anticipated by Inoue et al. (US 6,872,485).

With respect to claims 1-5,8-10,14 Inoue et al. teach a PEM fuel cell stack comprising a plurality of fuel cells, a sealant selected from the group consisting of a rubber, a resin or a composite material of a rubber and a resin, and a retaining portion which is formed on a separator (30) between which the sealants (10) is interposed. See Figures 6,7,10, Example.

With respect to claim 6, Inoue et al. teach the spacing portion is part of the separator (30). See Figures 6,7,10.

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With respect to claim 11, the retaining portions are formed either concave or convex toward the sealant. See Figure 10.

With respect to claim 13, the two components are a separator and an electrolyte membrane. See Figure 10.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dah-Wei D. Yuan whose telephone number is (571) 272-1295. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dah-Wei D. Yuan
July 24, 2006



DAH-WEI YUAN
PRIMARY EXAMINER